



Docket No. 202593US0

IN RE APPLICATION OF: MITSUBISHI ASUKA PAPER CO., LTD., et al.

SERIAL NO: 09/784,057

FILED: February 16, 2001

FOR: GRAFTED POLYMER ELECTROLYTE MEMBRANE, METHOD OF PRODUCING A GRAFTED POLYMER ELECTROLYTE MEMBRANE, AND FUEL CELL COMPRISING THE SAME

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

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APR 16 2003

TC 1700

SIR:

Transmitted herewith is an Amendment w/Marked-Up Copy in the above-identified application.

☒ No additional fee is required

☐ Small entity status of this application under 37 C.F.R. §1.9 and §1.27 is claimed.

☒ Additional documents filed herewith: Copy of PTO 1449 (as filed 02/16/01); Copy of JP 9-102322

The Fee has been calculated as shown below:

CLAIMS	CLAIMS REMAINING		HIGHEST NUMBER PREVIOUSLY PAID	NO. EXTRA CLAIMS	RATE	CALCULATIONS
TOTAL	10	MINUS	23	0	x \$18 =	\$0.00
INDEPENDENT	1	MINUS	3	0	x \$84 =	\$0.00
		<input type="checkbox"/> MULTIPLE DEPENDENT CLAIMS			+ \$280 =	\$0.00
		TOTAL OF ABOVE CALCULATIONS				\$0.00
		<input type="checkbox"/> Reduction by 50% for filing by Small Entity				\$0.00
		<input type="checkbox"/> Recordation of Assignment			+ \$40 =	\$0.00
		TOTAL				\$0.00

☐ A check in the amount of \$0.00 is attached.

☒ Please charge any additional Fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

☒ If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time may be charged to Deposit Account No. 15-0030. A duplicate copy of this sheet is enclosed.

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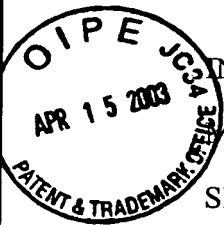
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DOCKET NO.: 202593US0

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IN THE UNITED STATES PATENT & TRADEMARK OFFICE



IN RE APPLICATION OF :

MICHIO ASUKABE, ET AL. : EXAMINER: PADGETT, M.

SERIAL NO: 09/784,057 :

FILED: FEBRUARY 16, 2001

: GROUP ART UNIT: 1762

FOR: GRAFTED POLYMER ELECTROLYTE MEMBRANE, METHOD OF PRODUCING
A GRAFTED POLYMER ELECTROLYTE MEMBRANE, AND FUEL CELL
COMPRISING THE SAME

AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

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SIR:

Responsive to the Official Action dated January 17, 2003, Applicants respectfully
request reconsideration in view of the following amendment and remarks:

IN THE CLAIMS

✓
Please cancel Claims 1-12, 14 and 21-23. Please amend Claims 13 and 15 as

follows:

A'
13. (Amended) A method of producing an electrolyte membrane comprising:
providing a precursor membrane comprising a polymer which is capable of being
graft polymerized;
exposing the surface of the precursor membrane to a plasma in an oxidative
atmosphere to generate a surface carbonyl group, a surface hydroxyl group, or a surface
carbonyl group and a surface hydroxyl group;
graft-polymerizing a side chain polymer to the plasma treated precursor membrane;
and